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SOUTH AUSTRALIA.

Annual Report

OF

The Central Board of Health

FOR THE

Year Ended 31st December, 1935.

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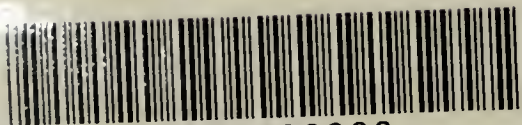
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THE PUBLIC HEALTH.

Annual Report of The Central Board of Health to the Minister of Health (Sir George Ritchie, K.C.M.G.)

Sir—We have the honour to submit the annual report for the year ending 31st December, 1935, on the work of the Central Board of Health of South Australia.

PART I.

GENERAL REVIEW OF ACTIVITIES.

Constitution of the Central Board.—The Central Board of Health consists of three medical men, one of whom is the Chairman and Permanent Head of the Department, appointed by the Governor, and two representatives of the Local Boards of Health. The representatives of Local Boards are elected biennially. At the beginning of the year the members were Drs. A. R. Southwood (Chairman and Head of the Department) and E. Angas Johnson, and Professor J. B. Cleland (members appointed by the Governor), Messrs. I. Isaacs (elected by the metropolitan Local Boards) and F. C. Lloyd (elected by the country Local Boards).

The death of Mr. Isaacs occurred on 16th January, 1935. For 14 years he had been an esteemed member of the Board as the elected representative of the metropolitan Local Boards. His extensive experience in public affairs and his sound judgment made him eminently suitable for the duties, and the assistance he rendered was most highly appreciated. His loss is deeply regretted.

On 2nd March, 1935, as the result of the biennial election, Mr. H. S. Hatwell was elected to represent the metropolitan Local Boards, and Mr. F. C. Lloyd re-elected to represent all other Local Boards. Mr. Hatwell is an Alderman on the Thebarton Town Council. He has been an ardent municipalist for many years, and his wide knowledge, gained in his various public activities, has made him an extremely useful member of the Central Board.

Board Meetings.—Twenty-six meetings of the Board were held during the 12 months. In addition to routine matters with which the department dealt, a number of special subjects received attention. These are reviewed in the appropriate portions of the report. The widening field of public health work has made the Board's discussions increasingly varied and interesting.

Staff of the Department.—The continued enthusiasm of the small staff of the department is greatly appreciated by the Board. It is realised that there are occasions when exceptionally heavy calls have made the work very arduous.

Scope of the Work.—The Board acts as a supervising body over all Local Boards, and supplements the supervisory work by an active policy of inspection and advice.

The following list indicates some of the routine inspections made by the Central Board Inspectors in 1935 :—Slaughterhouses, 147 ; butchers' shops, 93 ; bakehouses, 94 ; hotels, 117 ; business premises, 1,714 ; private premises, 1,475 ; septic tanks, 492 ; plans of septic tanks examined, 337 ; milk vendors' premises, 377 ; dealers in poisons, 829 ; schools, halls, institutes, &c., 211 ; food premises, 1,301 ; spirits tested, 444 ; exhumations and reburials attended, 11.

Special investigations made by the Inspectors of the Central Board into various health matters included the care and education of blind children in South Australia, fumes from a bitumen plant, and sanitation of unemployment relief camp and of the Mongolata goldfield.

Inquiry was also made into various matters relating to food and drugs. Some of the matters that received attention were tomato puree and tomato paste, labelling of wines at wineries, processing of egg pulp, bottling of preserved crayfish, and marketing of chilled eggs.

Other special investigations made by the department's staff are referred to elsewhere in the report.

"Public Health Notes".—The quarterly bulletin issued by the department continues to serve a useful purpose. The increased size of the bulletin will make it possible to disseminate among Local Boards and others interested a greater volume of information on health work. The ready response of those who have contributed valuable articles is greatly appreciated.

Maternal Mortality.—The money available from the Jubilee Fund was allocated on the lines laid down by the Special Committee, of which the Minister of Health (Sir George Ritchie) is Chairman. Most of the money will be expended in building alterations and additions to the Queen's Home at Rose Park, and in providing a training school in infant hygiene in connection with the Mothers' and Babies' Health Association.

Legislation.—On 19th December, 1935, the Health Act, 1935, came into force. This Act consolidates and repeals the whole of the Health Act of 1898 and its various amendments. The consolidated measure places the legislation in a convenient form, and makes it much easier of reference. The Health Act, 1935, does not embrace the aspect of health work in relation to food and drugs, which is dealt with in the Food and Drugs Act, 1908, and its amendments.

Amendments of the regulations under the Food and Drugs Act, 1908, were published in September, 1935, and dealt, among other items, with the wrapping of meat, fish, or bread; infants' food; cream of tartar; egg pulp; olive oil; bottled milk; cocoa; sauces; ice blocks; potable water; fruit drinks; spirits; drugs; liquid paraffin; and soap.

The Food and Drugs Act Amendment Act, 1934, provides that no person who is suffering from any infectious or loathsome disease shall handle any article of food or drug for sale, or be employed in connection with the sale of any food or drug. The diseases declared to be "loathsome diseases" are as follows:—

- (1) Any venereal disease:
- (2) Pulmonary or laryngeal tuberculosis:
- (3) Any disease of the respiratory tract associated with chronic cough and expectoration:
- (4) Any infective, septic, or ulcerative condition of the hands, or face, or mouth or throat:
- (5) Any malignant neoplastic disease:
- (6) Any other skin disease, unless certificates are produced from two legally qualified medical practitioners that the public health is not endangered by the sufferer handling or being employed in connection with any article of food or drug which is being offered, exposed, kept, stored, carried, delivered, or produced for sale.

Federal Health Council.—The Eighth Session of the Federal Health Council was held at Canberra in March, 1935. This State was represented by the Chairman of the Central Board of Health. Resolutions relating to the following subjects were passed:—Tuberculosis; Federal Registration Act for Nurses; Amendment to State Nurses Registration Acts; Maternal Mortality; Standards of Physical Fitness for Motor Drivers; Poisons Legislation; Control of Broadcasting in Relation to Medical, Pharmaceutical, or Similar Forms of Treatment of Disease; Narcotic Drugs; and Abortifacients.

Chairman's Tour Abroad.—During 1934 the Chairman of the Board visited England, Scotland, France, Germany, Canada, and the United States of America. He held an honorary commission from the Governor to inquire into public health matters. The Chairman's report on the investigations he made abroad was presented to the Governor in January, 1935.

PART II.

VITAL STATISTICS.

Correction of Statistics.—Comparison of the figures for the year 1934 shown in our previous report with those shown below will reveal several apparent discrepancies. The figures shown below include the final corrections made by the Acting Government Statist.

The figures here reproduced are compiled from information made available by the Acting Government Statist (Mr. A. W. Bowden). They serve to show the trends in the State from the public health standpoint.

Population of the State.—In 1935 the natural increase (the excess of births over deaths) was 3,107. The loss by migration was 958. The following table shows the population of the State in the years indicated:—

Year.	Males.	Females.	Total.
1900	180,349	176,901	357,250
1905	181,467	181,154	362,621
1910	206,557	200,311	406,868
1915	220,967	225,018	445,985
1920	245,300	245,706	491,006
1925	276,266	270,792	547,058
1930	288,618	285,849	574,467
1931	289,397	287,682	577,079
1932	290,254	289,039	579,293
1933	291,722	290,955	582,677
1934	292,519	291,775	584,294
1935	293,650	292,793	586,443

Births and Deaths.—The following return shows the number of births and deaths, and the rate per 1,000 of mean population, and the number of infantile deaths (under the age of one year) and the rate per 1,000 births :—

Period.	Births.		Deaths.			
	No.	Rate.	Total.		Infants.	
			No.	Rate.	No.	Rate.
Mean—						
1920–24.....	11,857	23·43	4,901	9·68	693	58·45
1925–29.....	11,301	20·16	5,034	8·98	526	46·54
1930–34.....	8,989	15·54	5,001	8·65	342	38·05
Year—						
1930.....	9,984	17·42	4,851	8·46	483	48·38
1931.....	9,079	15·77	4,888	8·49	330	36·35
1932.....	8,521	14·74	4,957	8·58	312	36·62
1933.....	8,900	15·32	4,904	8·44	286	32·14
1934.....	8,459	14·50	5,403	9·26	301	35·58
1935.....	8,270	14·14	5,163	8·83	289	34·95

Infantile Mortality.—In the “ Statistical Register of the State of South Australia for the Year 1935-36, Part II.—Population and Vital,” the Acting Government Statist cogently reviews this matter. He states there were 289 deaths of infants under one year of age, a decrease of 12 compared with the 1934 figure. The average per 1,000 live births was 34·95, being the lowest except for the record in 1933, which was also the lowest yet recorded for any State. The South Australian rate for 1933 was only 0·92 more than the world record of 31·22 for New Zealand in 1932. The Acting Government Statist points out that for many years South Australia, in common with the other States of the Commonwealth and New Zealand, has had a very low mortality rate for infants under one year of age compared with other countries. But even so (he adds) the economic loss to the State is considerable, for in the last 10 years, 4,102 infants died before reaching the age of one year and, in addition, 1,350 before reaching five years of age, making a total loss of 5,452 under five years of age. In other words, the State has lost by death during the last 10 years approximately one baby in every 24 born before reaching the age of one year with an additional loss before the age of five is reached. Further, there is the loss of unrecorded still-born children, approximately 300 annually. The chief causes of the deaths of infants have been :—Premature birth, 101 ; malformations, 40 ; injury at birth, 15 ; congenital debility, 15 ; other diseases of infancy, 23 ; diarrhoea and enteritis, 7 ; pneumonia and broncho-pneumonia, 35 ; and whooping cough, 14.

Causes of Deaths.—The principal causes of deaths and the rates per 10,000 of mean population are shown in the subjoined table :—

Disease.	Persons.			Rates.		
	1933.	1934.	1935.	1933.	1934.	1935.
Diseases of the heart	816	956	1,029	14·04	16·38	17·59
Cancer and other malignant tumors	679	651	610	11·69	11·16	10·43
Tuberculosis (all forms)	303	281	260	5·22	4·82	4·44
Cerebral haemorrhage, softening, &c.	440	440	488	7·57	7·55	8·34
Pneumonia, Lobar-, Broncho-, &c.	326	402	390	5·61	6·89	6·67
Bronchitis (all forms)	69	86	59	1·19	1·47	1·01
Other diseases of respiratory system	101	108	113	1·74	1·85	1·93
Nephritis—Acute and chronic	290	260	274	4·99	4·46	4·68
Diabetes mellitus	116	110	88	2·00	1·89	1·50
Puerperal causes	48	61	49	·83	1·05	·84
Congen. debility, malformations, &c.	210	207	199	3·61	3·55	3·40
Senility	315	370	322	5·42	6·34	5·50
Suicides.....	60	78	59	1·03	1·34	1·01
Violent deaths (ex suicides).....	222	294	242	3·82	5·04	4·14
Diarrhoea and enteritis	33	76	27	·57	1·30	·46
Whooping cough	11	7	23	·19	·12	·39
Diphtheria and croup	19	14	20	·33	·24	·34
Influenza	34	51	26	·59	·87	·45
Typhoid fever	2	4	5	·03	·07	·09
Appendicitis	32	44	40	·55	·75	·68
Hernia, intestinal obstruction	41	54	53	·70	·92	·91
Cirrhosis of liver	21	23	23	·36	·40	·39
Tetanus.....	14	13	14	·24	·22	·24
All other	702	813	750	12·08	13·95	12·82
Total	4,904	5,403	5,163	84·40	92·63	88·25

The figures indicate a striking increase in the death rate from heart diseases in recent years. Without a careful analysis, however, it is not possible to conclude whether the incidence of these diseases is increasing or not. It is to be noted that fewer deaths are being attributed to senility while increases are recorded

in cerebral haemorrhage and diseases of the heart. Greater precision in the medical certification of death appears to be the important factor.

In most countries more deaths are now being attributed to cancer. It is usually noted that there has been little if any increase in deaths from cancer in age groups up to 60 years. There is now a greater proportion of persons living into and beyond middle life (the ravages of the diseases of infancy and childhood have been less severe) and diseases of the aged are becoming commoner causes of death. Diseases of the heart, arterial degeneration and cancer exact their toll from the older people.

There is a continued downward movement of the death rate from tuberculosis. As in other countries, young women of 15 to 25 years appear most vulnerable.

The incidence and mortality from infectious diseases are reviewed in another portion of this report.

Deaths by Violence.—The death rate from these causes is subject to irregular fluctuations. In 1935 the number of persons meeting death by violence was 301, compared with 372 in the previous year. The Acting Government Statist's figures are :—

	1930.	1931.	1932.	1933.	1934.	1935.
Suicide	65	71	51	60	78	59
Homicide	12	10	10	13	10	4
Accidental burns	16	12	19	9	13	9
Accidental mechanical suffocation	—	—	3	7	5	3
Accidental drowning	46	30	52	43	29	32
Accidental fall	44	60	38	33	54	47
Automobile accidents	60	34	50	52	74	69
Other causes	131	75	101	65	109	78
Total deaths by violence	374	292	324	282	372	301

The sex incidence of suicide maintains approximately the usual ratio, a circumstance noted all over the world. In this State the figures for recent years have been :—

Suicides.	1930.	1931.	1932.	1933.	1934.	1935.
Males	55	59	38	48	59	46
Females	10	12	13	12	19	13

PART III.
SANITATION.

Although public health activities are assuming ever-widening scope, the basis of good health work is still to be found in efficient sanitation. General cleanliness, the proper disposal of refuse, the provision of satisfactory food and water supplies—these must always be the bedrock. The Central Board, through its officers, endeavours to exercise a constant watchfulness on sanitary arrangements throughout the State.

Shacks on Foreshores.—Special inquiries were made regarding shacks erected by private individuals on or near the foreshore in various parts of the State. The structures are used principally for residential purposes during week-ends and for longer periods during the summer months, and are built generally of weatherboard or flat or corrugated iron. They usually lack beauty and uniformity. The conditions existing in connection with some of the premises were found unsatisfactory from a sanitary point of view. The Local Boards of Health concerned were communicated with and their attention was invited to their powers of control over these premises, with the view to the necessary sanitary requirements being conformed to.

Camping Reserves.—Owing to the convenience of modern transport facilities, holiday-making in camps is becoming increasingly popular, particularly with persons having motor cars and caravans. It is obvious that grave risks to the public health may arise unless proper sanitary precautions are observed. In various parts of the State reserves have been set aside for the use of campers and particular attention has been given to the provision of sanitary conveniences. In addition, supervision of these reserves by an attendant is exercised during holiday periods. Local Boards are urged to give special attention to camp sites, lest serious insanitary conditions arise.

Flood at Noarlunga.—Owing to the Onkaparinga River overflowing its banks at Noarlunga and at Port Noarlunga in September, flooding of houses, yards and cellars of business premises in portions of those townships occurred. The prompt and effective measures that were taken in the draining away of the water and of cleaning up the various premises in order to protect the health of the residents reflected great credit on the Local Board of Health and its officers.

Swimming Pools.—The proposal in several country towns to establish pools has been considered by the Central Board, and recommendations on the schemes are being reviewed. The provision of properly equipped swimming pools is an expensive matter, especially in inland centres. Careful and repeated chlorination and filtration of the water are essential requirements in modern pools. Swimming pools provide for healthful and pleasant sport, but unless proper sanitary control is observed they may be a grave danger to community health.

Lead Poisoning.—Motor body works have been supervised, and precautions advised to prevent lead poisoning risks from the processes involving the use of lead. The circular on the Prevention of Lead Poisoning in Factories, issued by the Central Board in January, outlines the necessary precautions. Local Boards must see that any battery factories and other lead works within their areas are complying with the requirements.

PART IV.

FOOD AND DRUGS.

The Advisory Committee under the Food and Drugs Act, 1908.—The Act provides that the Committee appointed by the Governor shall consist of the Chairman of the Central Board of Health (as Chairman), the Professor of Chemistry in the University of Adelaide, the Government Analyst, the Officer of Health for the City of Adelaide, and three other persons conversant with trade requirements. During the year the members were Dr. A. R. Southwood (Chairman), Professor A. Killen Macbeth, Mr. W. T. Rowe (Government Analyst), Dr. E. Angas Johnson, and Messrs. W. M. Fowler, E. F. Lipsham and F. M. Standish.

The Committee held three meetings. The following subjects were dealt with :—Ice blocks ; potable water ; olive oil ; soap ; absorbent cotton wool and surgical dressings ; modification of Food and Drugs Regulations ; tomato paste and tomato puree ; registration of premises where drugs are prepared or manufactured for sale ; milk shops ; labelling of coffee and chicory essence or extract ; flour ; standardisation of certain medicinal preparations ; and dried milk. The Chief Secretary was advised of those matters in which the Committee thought that action was necessary.

Water Supply.—During 1935 the Advisory Committee on Water Supplies Examination consisted of the Engineer-in-Chief (Mr. J. H. O. Eaton) as Chairman, the Engineer for Water Supply (Mr. C. G. F. Johnson), the Chairman of the Central Board of Health (Dr. A. R. Southwood), Professor J. B. Cleland, Dr. E. Angas Johnson, and Dr. E. McLaughlin (Director of the Government Laboratory, Adelaide Hospital).

Vendors of Milk.—The Local Government Act, 1934, did not re-enact the provisions of the Municipal Corporations Act and the District Councils Act enabling councils to provide for the licensing of vendors of milk and the registration of premises under by-laws. The forty-one councils which had been previously acting under by-laws were therefore required to effect such provisions under the Food and Drugs Act, 1908, as Local Boards of Health. Two of them, however, resolved to relinquish control and the Central Board took over the powers. In another district owing to the default of the Local Board, the Central Board took over control.

In the metropolitan area the Metropolitan County Board issued licences to 1,515 vendors. The Central Board of Health is now providing for the licensing of vendors of milk and the registration of their premises in 86 districts outside the metropolitan area, and the number licensed for the year ending 30th June, 1935, was 420. The Local Boards in the more closely settled areas outside the metropolitan area effecting licensing in their districts licensed 264 vendors.

Bakehouses.—In regard to the inspection of bakehouses in the metropolitan area, dealt with in the annual report for 1934, inquiries were extended in 1935 to the bakehouses in country districts where 120 premises were inspected. Most of the bakehouses were found in a satisfactory condition. Some of the buildings were old, but none were considered unsuitable. At some of the premises minor repairs and alterations were ordered.

Flour.—The Food and Drugs Regulations, 1932, provide that flour shall not contain more than two parts per million of nitrites calculated as sodium nitrite. The use of improvers is also prohibited. The analyses of various samples of flour obtained in the metropolitan area and country districts showed that some contained more than the permitted quantity of nitrites, and one sample contained bromates. The millers made strong representations for the amendment of the regulation, maintaining that it was impossible to comply with the standard concerning the amount of nitrites, and asked that the regulation in force in some of the other States concerning improvers should be adopted. The Advisory Committee under the Food and Drugs Act appointed a sub-committee consisting of Professor A. Killen Macbeth, Mr. W. T. Rowe (Government Analyst), and Mr. W. M. Fowler (one of the trade representatives on the Advisory Committee), to inquire into the matter. The sub-committee has not yet finalised its investigations.

Flour Mills.—An inspection was made by Central Board officers of seven flour mills in the metropolitan area and ten in the country, with the view to ascertaining the conditions under which flour was manufactured.

Instructions were given to have the exterior of the wheat cleaning and milling machines, flour shutes or flumes, kept free from cobwebs and dust as a precaution against the breeding of the flour moth. Instructions were also given to have matters relating to the sanitary accommodation attended to.

The inspection did not show that any of the flour mills were in such a dirty condition that the flour manufactured in them was likely to become unfit for human consumption. Ten of the mills were in a good state of repair and cleanliness, and seven were in a fair state of repair and cleanliness.

Carriage of Hides and Skins with Fruit and Vegetables.—For some time a growing practice has been observed, particularly in the far western portion of the State, of persons with lorries trading in hides and skins, and at the same time trading in fruit, vegetables, and other foodstuffs. Two practices were observed. Hides and skins in various stages of condition were conveyed from the country to the city and the lorries back-loaded with fruit and other foodstuffs. It was considered sufficient if, before loading with foodstuffs, the lorry was thoroughly cleansed, a canvas sheet placed on the floor of the lorry, fruit packed in cases, and vegetables in drums or bags, and then covered with a canvas sheet. The other practice of mixed trading, the load consisting of foodstuffs as well as hides and skins, is discouraged by the Central Board of Health, and local authorities are urged to prohibit the practice where possible. It is realised, however, that a strict prohibition of this practice might place undue hardship on the people residing in far-distant districts. One local authority has insisted on the lorry owner providing two decks—the lower to contain the foodstuffs and the upper the hides and skins, with a tarpaulin over the top floor. Two men operate the lorry, one of whom deals with the fruit, and the other with hides and skins only.

Control of Sale of Poisons.—The staff's activities in this important branch of work were maintained. The Central Board inspectors made 829 visits, and 849 persons were licensed as dealers in poisons.

Poisons Regulations.—A draft of proposed amendments to the regulations is now under consideration by the Advisory Committee. The regulations recently adopted in Great Britain are being considered as a basis for new regulations in this State.

Fluorine Poisoning.—Information was sought from overseas regarding fluorine poisoning, particularly as to provisions for preventing the poisonous effect of fluorine compounds in the spheres of industry and nutrition. The use of fluorine compounds is not permitted in connection with any article of food, nor, so far as is known, are such compounds used in any factories in the State. It was ascertained that fluorine compounds were used for the etching of glass many years ago, but this method had now been superseded by sand blasting.

Antimony Poisoning from Enamelled Vessels.—In recent years there have been in England several outbreaks of antimony poisoning, due to the use of enamelled vessels of inferior quality for the preparation of acid drinks such as lemonade. A special inquiry into the matter was conducted by the Ministry of Health, England, last year (1934). From this inquiry it appeared that antimony oxide was widely used, in place of tin oxide, as an opacifying agent in the enamelling of hardware on account of its comparative cheapness. A writer in the Medical Annual for 1934 points out that the antimony is dissolved not only by the tartaric acid in "lemonade crystals," but also by the natural citric acid of fresh lemons. The buckets and cans responsible for the poisoning in the cases referred to were not intended for use with food and drinks, but the fact remains that they were so used, and there was nothing in their appearance to suggest that they were not suitable for the purpose. Now that the use of antimony in the place of tin has become common, it is advisable that the public should be warned that enamelled hollow-ware vessels obviously intended for other purposes may be dangerous if used for the preparation or storage of food or drink.

Inquiries made from manufacturers in this State, by an Inspector of the Central Board of Health, indicated that antimony compounds are not used in the enamelling process of hollow-ware vessels made in South Australia.

PART V.

PREVENTION AND CONTROL OF INFECTIOUS DISEASES.

The subjoined table indicates the numbers of cases of infectious diseases reported during 1935, and the deaths that occurred. The cases and deaths for the preceding two years are also shown in the table:—

Infectious Diseases.	Cases Reported.			Deaths.		
	1933.	1934.	1935.	1933.	1934.	1935.
Cerebro-Spinal Meningitis	3	2	3	—	1	1
Chickenpox	1,062	1,099	1,192	—	—	—
Diphtheria	877	582	526	17	13	19
Dysentery—Amoebic	—	—	1	—	—	—
Dysentery—Bacillary	5	2	—	3	1	1
Encephalitis Lethargica	2	1	2	4	1	2
Endemic Typhus Fever	8	8	14	—	—	1
Erysipelas	130	183	95	3	3	6
Favus	—	—	3	—	—	—
Influenza	804	1,280	705	30	57	25
Malaria	—	3	2	—	—	—
Measles	13,469	1,249	454	13	7	—
Mumps	454	27	84	1	—	—
Paratyphoid Fever	3	—	2	—	—	—
Poliomyelitis Anterior Acute	13	4	18	—	1	2
Puerperal Fever	80	43	46	10	12	8
Pulmonary Tuberculosis	383	370	318	257	242	233
Scarlet Fever	978	643	461	4	1	—
Typhoid Fever	13	20	29	1	2	5
Whooping Cough	1,008	1,313	3,616	11	6	25

Considerable decreases occurred in the cases of influenza, measles, scarlet fever, and erysipelas notified, and a decrease occurred in regard to diphtheria. Another cycle of infection occurred in regard to whooping cough, and the number reported increased from 1,313 to 3,616. Increases occurred in the incidence of poliomyelitis anterior acuta, typhoid fever, and endemic typhus fever. In December an outbreak of typhoid fever in the Woodville and Hindmarsh districts occurred. The cases occurring were traced to a dairy, and prompt measures enabled the outbreak to be controlled. A review of the typhoid fever outbreak will be given in the report for 1936.

The incidence of Infectious Diseases in the Statistical Districts.—For statistical purposes the State is subdivided into various divisions, as under :—

Division I.—Metropolitan, comprising Adelaide, Brighton, Burnside, Campbelltown, Colonel Light Gardens, Glenelg, Henley and Grange, Hindmarsh, Kensington and Norwood, Marion, Mitcham, Payneham, Port Adelaide, Prospect, St. Peters, Thebarton, Unley, Walkerville, West Torrens, Woodville, Enfield.

Division II.—Central, comprising Angaston, Balaklava, Barossa, Dudley, East Torrens, Edithburgh, Encounter Bay, Eudunda, Freeling, Gawler, Gumeracha, Kapunda Town, Kapunda District, Keyneton and Swan Reach, Kingscote, Light, Maitland, Meadows, Minlaton, Mount Barker, Mount Pleasant, Mudla Wirra, Munno Para East, Noarlunga, Onkaparinga, Owen, Port Elliot, Port Wakefield, Riverton, Robertstown, Saddleworth, Salisbury, Stirling, Strathalbyn Town, Strathalbyn District, Tanunda, Teatree Gully, Truro, Victor Harbour, Warooka, Willunga, Yankalilla, Yorke Peninsula, Yorketown.

Division III.—Lower North, comprising Blyth, Burra Town, Burra Burra, Butc, Clare Town, Clare District, Clinton, Crystal Brook, Georgetown, Gladstone, Hallett, Jamestown Town, Jamestown District, Kadina Town, Kadina District, Laura, Moonta, Pirie, Port Broughton, Port Pirie, Redhill, Snowtown, Spalding, Upper Wakefield, Wallaroo.

Division IV.—Upper North, comprising Beltana unincorporated area, Carrieton, Cockburn unincorporated area, Hawker, Kanyaka, Orreroo, Peterborough Town, Peterborough District, Port Augusta, Port Germein, Quorn, Wilmington.

Division V.—South-Eastern, comprising Beachport, Lacepede, Lucindale, Millicent, Mount Gambier Town, Mount Gambier District, Naracoorte Town, Naracoorte District, Penola, Port MacDonnell, Robe, Tantanolula, Tatiara, Tintinara unincorporated area.

Division VI.—Western, comprising Cleve, Elliston, Fowler's Bay unincorporated area, Franklin Harbour, Kimba, Le Hunte, Lincoln, Marree unincorporated area, Port Augusta unincorporated area, Murat Bay, Port Lincoln, Streaky Bay, Tarcoola unincorporated area, Tumby Bay.

Division VII.—Murray Mallee, comprising Berri, Brown's Well, Cobdogla, East Murray, Karoonda, Lameroo, Loxton, Mannum, Marne, Meningie, Mobilong, Morgan, Murray Bridge, Paringa, Peake, Peebinga unincorporated area, Pinnaroo, Renmark Town, Renmark Trust, Waikerie.

The table below shows the numbers of cases and deaths from infectious diseases in the several divisions :

INFECTIOUS DISEASES.

Divisional Totals of Cases and Deaths reported during 1935.

Disease.	Division I. Metro- politan.		Division II. Central.		Division III. Lower North.		Division IV. Upper North.		Division V. South- Eastern.		Division VI. Western.		Division VII. Murray Mallee.		Total State.	
	Cases.	Dths.	Cases.	Dths.	Cases.	Dths.	Cases.	Dths.	Cases.	Dths.	Cases.	Dths.	Cases.	Dths.	Cases.	Dths.
Cerebro-Spinal Meningitis	3	3	—	—	—	—	—	—	—	—	—	—	—	—	3	3
Chickenpox	822	—	188	—	37	—	21	—	2	—	95	—	27	—	1,192	—
Diphtheria	438	12	23	1	35	1	2	—	9	3	8	1	11	1	526	19
Dysentery, Bacillary	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1
Encephalitis Lethargica	1	1	1	1	—	—	—	—	—	—	—	—	—	—	2	2
Endemic Typhus Fever	11	1	1	—	2	—	—	—	—	—	—	—	—	—	14	1
Erysipelas	65	4	11	—	6	—	3	—	1	1	5	1	4	—	95	6
Favus	—	—	—	—	—	—	2	—	—	—	1	—	—	—	3	—
Influenza	355	14	105	5	76	—	64	—	19	2	63	3	23	1	705	25
Malaria	2	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—
Measles	84	—	14	—	43	—	5	—	1	—	4	—	303	—	454	—
Mumps	58	—	7	—	8	—	2	—	3	—	—	—	6	—	84	—
Paratyphoid Fever	—	—	2	—	—	—	—	—	—	—	—	—	—	—	2	—
Poliomyelitis Anterior Acuta	11	2	4	—	1	—	2	—	—	—	—	—	—	—	18	2
Puerperal Fever	35	6	6	—	1	—	1	—	—	—	2	1	1	1	46	8
Pulmonary Tuberculosis	248	192	23	15	15	8	4	2	7	5	4	4	17	7	318	233
Scarlet Fever	286	—	54	—	44	—	6	—	20	—	20	—	31	—	461	—
Typhoid Fever	19	2	5	—	4	3	—	—	—	—	—	—	1	—	29	5
Whooping Cough	1,613	15	818	1	569	4	37	1	48	—	214	4	317	—	3,616	25

Diphtheria Immunization.—Immunization against diphtheria is being encouraged by the Central Board of Health. Arrangements have been completed whereby the immunizing agent (anatoxin) is issued free by the Central Board to Local Boards and institutions conducting anti-diphtheria campaigns. The plan has given a decided stimulus to immunization throughout the State.

To introduce the Scheme to Local Boards in the metropolitan area a Conference was arranged by the Central Board. This took place in the Council Chamber, Town Hall, Adelaide, on 6th December, 1935, and the Right Honourable the Lord Mayor (Mr. J. R. Cain) presided. About 50 representatives attended.

The Chairman of the Central Board of Health (Dr. A. R. Southwood) delivered an address, outlining the events leading to the Conference and amplifying the pamphlet relating to the Prevention of Diphtheria, copies of which were supplied to those attending. Mr. Ford (St. Peters) moved, and Mr. Langdon (Thebarton) seconded a resolution endorsing the action taken by the Central Board of Health. The Chairman declared the motion carried unanimously. Various questions were asked, and replies were given by Dr. Southwood. Mr. H. S. Hatwell moved, and Mr. F. C. Lloyd seconded a vote of thanks to the Lord Mayor (Mr. J. R. Cain) for presiding, and the Adelaide City Council for making the Chamber available for the Conference.

The leaflet issued by the Central Board sets out clearly the method and dosage for anatoxin administration. There are indications that Local Boards throughout the State are interesting themselves in the Scheme.

Psittacosis (The Parrot Disease).—The public health aspects of this serious disease are now prominently in the minds of health authorities in Australia.

In February a report was received from a medical practitioner that a patient of his, a woman aged 54, residing in a suburb of Adelaide, was thought to be suffering from psittacosis and broncho-pneumonia. The circumstances of her illness and the fact that some parrots had died at her home just prior to and during her illness aroused the suspicion of psittacosis. The patient died after an acute illness of nine days. Subsequent investigations, however, showed that in the faeces of the woman an organism of the Salmonella (food poisoning) group had been isolated, and the diagnosis of psittacosis was abandoned.

Evidence of psittacosis among birds in Australia has been produced, and, in view of the possibility of the disease being transmitted to man, the Central Board gave consideration to the matter of recommending that the disease be proclaimed an “infectious disease” within the meaning of the Health Act. The Board decided to defer the matter, but to urge medical practitioners who see any suspicious cases to advise the Board without delay so that investigations may be made.

PART VI.

PREVENTION AND CONTROL OF TUBERCULOSIS.

Probably the first and greatest public health problem in most countries at the present time is the efficient control of tuberculosis. Although there has been a striking and steady decline in the tuberculosis death rate since the beginning of the present century, there is still need for further improvement. Throughout the world tuberculosis remains a potent cause of illness and death in persons of the 20-40 age group.

The Acting Government Statist has reported that the deaths from tuberculosis (all kinds) per 100,000 of population averaged annually 86.5 for the period 1910-1914, falling to an annual average of 51.4 for the period 1930-1934. Of the total of 260 deaths from tuberculosis (all kinds) during 1935, tuberculosis of the respiratory system accounted for 85 per cent. The death rates from tuberculosis of the respiratory system per 100,000 population for the years 1934 and 1935 were—1934, 43.2; 1935, 39.1. This represents a considerable fall compared with previous years. For the period 1910-1914, the death rate from tuberculosis of the respiratory system was 71.8; in 1930-1934 the rate had fallen to 45.0, a decrease of 26.8 per 100,000 population.

The statistics since 1899, when pulmonary tuberculosis was declared a notifiable disease in this State, are as under :—

PULMONARY TUBERCULOSIS.

Year.	Cases Reported.	Deaths Reported.	Year.	Cases Reported.	Deaths Reported.
1899.....	228	318	1918.....	475	332
1900.....	310	301	1919.....	421	331
1901.....	352	306	1920.....	561	335
1902.....	323	299	1921.....	517	337
1903.....	346	305	1922.....	478	319
1904.....	333	298	1923.....	478	334
1905.....	352	290	1924.....	551	336
1906.....	341	307	1925.....	540	332
1907.....	448	293	1926.....	483	346
1908.....	526	352	1927.....	467	335
1909.....	433	363	1928.....	472	291
1910.....	388	338	1929.....	458	302
1911.....	412	292	1930.....	425	256
1912.....	429	329	1931.....	403	291
1913.....	561	335	1932.....	342	238
1914.....	487	290	1933.....	383	257
1915.....	493	339	1934.....	370	242
1916.....	608	361	1935.....	318	233
1917.....	606	361			

There were 998 persons known to be suffering from pulmonary tuberculosis residing in the various Local Board areas on 31st December, 1935, as indicated hereunder :—

ADELAIDE	65	Karoonda	3	Port Broughton	1
Angaston	4	Keyneton and Swan Reach .	—	Port Elliot	1
Balaklava	5	Kimba	—	Port Germein	5
Barossa	3	Kingscote	1	Port Lincoln	1
Beachport	—	Lacedpede	—	Port MacDonnell	2
Berri	3	Lamcree	—	Port Pirie	23
Blyth	—	Laura	2	Port Wakefield	2
BRIGHTON	13	LeHunte	2	PROSPECT	68
Brown's Well	1	Light	2	Quorn	—
Burra Town	3	Lincoln	—	Redhill	—
Burra Burra	2	Loxton	5	Renmark Town	1
Bute	3	Lucindale	1	Renmark Trust	1
Carrieton	—	Maitland	—	Riverton	—
Clare Town	1	Mannum	1	Robe	—
Clare District	1	MARION	13	Robertstown	—
Cleve	—	Marne	—	Saddleworth	2
Clinton	—	Meadows	2	Salisbury	3
Cobdogla	1	Meningie	2	Snowtown	3
COL. LIGHT GARDENS .	13	Millicent	2	Spalding	2
Crystal Brook	2	Minlaton	3	Stirling	11
Dudley	—	MITCHAM	35	ST. PETERS	16
East Murray	2	Mobilong	8	St athalbyn Town	4
East Torrens Local	2	Moonta	10	Strathalbyn District	1
EAST TORRENS COUNTY	89	Morgan	1	Streaky Bay	1
Edithburgh	1	Mount Barker	3	Tantanoola	3
Elliston	—	Mount Gambier Town	3	Tanunda	—
Encounter Bay	—	Mount Gambier District	1	Tatiara	1
ENFIELD	9	Mount Pleasant	—	Teatree Gully	2
Eudunda	—	Mudla Wirra	2	THEBARTON	36
Franklin Harbour	1	Munno Para East	—	Truro	1
Freeling	1	Murat Bay	4	Tumby Bay	2
Gawler	8	Murray Bridge	5	UNLEY	69
Georgetown	—	Naracoorte Town	3	Upper Wakefield	3
Gladstone	—	Naracoorte District	—	Victor Harbour	3
GLENELG	20	Noarlunga	4	Waikerie	5
Gumeracha	—	Onkaparinga	4	WALKERVILLE	24
Hallett	1	Orroroo	4	Wallaroo	1
Hawker	1	Owen	4	Warooka	1
HENLEY AND GRANGE.	6	Paringa	—	WEST TORRENS	93
HINDMARSH	27	Peake	—	Willunga	6
Jamestown Town	3	Penola	1	Wilmington	—
Jamestown District	1	Peterborough Town	4	WOODVILLE	75
Kadina Town	4	Peterborough District	1	Yankalilla	1
Kadina District	6	Pinnaroo	3	Yorke Peninsula	5
Kanyaka	3	Pirie	—	Yorketown	2
Kapunda Town	1	PORT ADELAIDE	62		
Kapunda District	1	Port Augusta	4		

(Metropolitan Local Boards in capitals.)

OUT DISTRICTS.

Beltana	—	Innaminka	—	Penong	—
Blinman	—	Iron Knob	—	Port Augusta West	—
Cockburn	2	Mannahill	—	Tarcoola	1
Farina	—	Marree	—	Whyalla	1
Fowler's Bay	—	Oodnadatta	—	Yunta	1

Tintinara Unincorporated Area (Coonalpyn) 1.

Where no figure is shown, no known sufferers were alive on 31st December, 1935.

In addition to these, there were 186 sufferers in institutions, as shown below :—

Angorichina Hostel	6
Adelaide Hospital	27
Bedford Park Sanatorium	40
Kalyra Sanatorium	41
Keswick Repatriation Hospital	5
Northfield Consumptive Home	67

The basis of anti-tuberculous work is the proper supervision of home conditions. While patients are under supervision in proper institutions, the risk of spread of the disease is negligible. In their own homes, however, many patients are apt to become careless, and other persons in the household—especially children—may be exposed to grave danger. The services of Trained Nurse-Inspectors on the staffs of Local Boards are essential for the proper guidance of patients and their families.

PART VII.

LOCAL BOARDS OF HEALTH.

Staff Arrangements.—There are, throughout the State, 142 Local Boards of Health, whose duty and privilege it is to administer the Health Act and The Food and Drugs Acts in their respective areas. To carry out the work efficiently, each Local Board needs suitable personnel. The officers of a Board should comprise :—(1) Secretary, (2) Officer of Health—a medical man to advise the Local Board from the medical point of view, (3) one or more Health Inspectors—whose main duties relate to sanitation and the supervision of food and drugs matters, and (4) one or more Trained Nurse Inspectors, whose main duties relate to the control of infectious diseases and tuberculosis. Without adequate staff, Local Boards cannot do full justice to their important functions.

Visits to Local Boards.—In June, 1935, representatives of the Central Board visited Local Boards in the mid-north area. At Koorunga a conference took place with representatives of the Local Boards for the Town of Burra and for the surrounding districts. Representatives of the Local Boards for the Town of Peterborough, the District of Peterborough, and the District of Orreroo assembled at Peterborough and met the Central Board representatives.

In September the Local Boards in the northern portion of Yorke Peninsula were visited by Central Board representatives. Successful meetings were held at Port Wakefield, Wallaroo, Kadina, Moonta, Bute, Snowtown and Blyth.

At the invitation of the Local Boards for Thebarton and for St. Peters, Central Board representatives attended these centres to discuss the principles and practice of public health work.

From the questions introduced for discussion at the various meetings, it is apparent that most Local Boards are undertaking their duties with proper seriousness. In many instances, however, the work is being hampered through insufficient money being made available for it. All authorities engaged in public health work should realise that undue stinting may be a very short-sighted policy. In times when the health of the community appears satisfactory, the need for the expansion of official services may not seem great. Yet it is only by continued watchfulness and preparedness that a sound public health system can be maintained.

PART VIII.

OBSERVATIONS.

1. This report indicates a fairly satisfactory condition of the public health of the State, according to present-day standards.

2. The work of many of the Local Boards is efficiently performed. In some instances there is room for greater enthusiasm and interest in health work.

3. The Scheme for Diphtheria Immunization adopted by the Central Board of Health and outlined in the annual report of the Board for 1934 was approved by the Government. At the latter end of 1935 several Local Boards were preparing to avail themselves of the facilities for the free issue of anatoxin, under the Scheme outlined.

4. The full co-operation of health departments, the medical profession and of the general public is necessary for the attainment of the highest standards of community health.

A. R. SOUTHWOOD, Chairman.	} Members.
E. ANGAS JOHNSON,	
J. B. CLELAND,	
H. S. HATWELL,	
F. C. LLOYD,	

S. C. STENNING, Secretary.

Adelaide, 27th October, 1936.